



INTRODUCTION

The importance of attention to detail and the avoidance of complacency when using weapons and pyrotechnics in garrison and tactical environments is paramount.

OBJECTIVE



Apply RISK MANAGEMENT to Weapons, Ammunition* and Range Operations for ACCIDENT PREVENTION.

* Ammunition includes pyrotechnics

REASONS FOR ERRORS



The major underlying reasons for errors related to all accidents and injuries are:

- Lack of self-discipline.
- Failure to enforce standards.
- Inadequate training.

WEAPONS



Most common injury-producing areas in the handling of weapons:

- Failure to follow procedures
- Improper or inadequate clearing
- Untimely loading/unloading

WEAPONS



Most common injury-producing areas in the handling of weapons (Continued):

- Personnel in the path of recoil or back-blast
- Fratricide

Mission: Conduct tube wear test

24 Jun 99

Hazards

- Improper body position
- Not following proper misfire procedures
- Unqualified personnel conducting duties

Results

1 Fatality

Controls

- Maintain proper body position
- Ensure compliance with SOP

SCENARIO



While on deployment in Albania, a junior officer was in his barracks room handling another officer's 9mm weapon when it accidentally discharged, striking him in the left thigh.

RESULT



The soldier was transported to an allied medical facility where he underwent surgery for amputation. The round had severed his femoral artery.

FACTORS



Factors Leading To The Injury:

- Failure to follow procedures
- Improper or inadequate clearing

AMMUNITION



Most common injury-producing areas in the handling of ammunition & pyrotechnics:

- Failure to properly observe safety features
- Improper procedures
- Improper attention
 - in the recoil or back-blast area

AMMUNITION



Most common injury-producing areas in the handling of ammunition & pyrotechnics:

- Detonating a "found" simulator
- Faulty simulator premature or inadvertent discharge

SCENARIO



After conducting defensive operations during a JRTC rotation, an experienced infantry NCO handled an artillery simulator in an unauthorized manner.

The NCO punctured a simulator, poured the powder onto the ground and ignited the powder with a lighter.

RESULT



As a result, the NCO received burns to his hand, head and his right eye resulting in permanent loss of vision.

FACTORS



Factors Leading to the Injury:

- Failure to properly observe safety features
- Improper procedures

RANGE OPERATIONS LISTARI



Most common injury-producing areas in range operations:

- Demolitions
- Inadequate training
- Target misidentification and negligent discharge





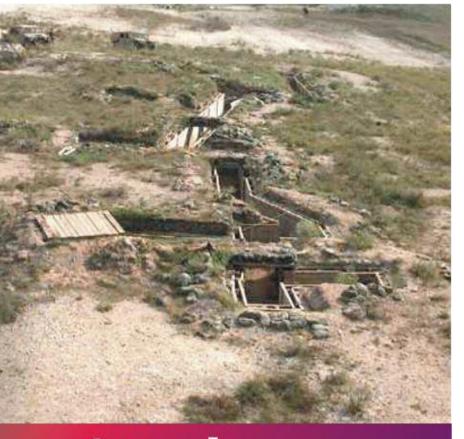
Most common injury-producing areas in range operations: (continued):

- Inadequate planning
- Inadequate supervision

Mission: Conduct Night Live Fire (From Trench Line)

Hazards

- Soldiers not having confidence in NVDs
- Not identifying targets before engaging
- Sectors of fire not clearly established
- Range fan markers not visible



Controls

Results

1 Fatality

- Train soldiers on NVD use and limitations
- Positive ID of targets prior to engagement
- Establish specific individual sectors of fire in compliance with range SOPs and STPs
- Adequately illuminate range fan limits

FACTORS



Factors Leading To The Fatality:

- Inadequate training
- Target misidentification & negligent discharge
- Failure to follow procedures
- Failure to enforce standards



Personnel were burning excess artillery propellant bags. There was a HMMWV parked about 9 ft from the burn site. The heat from the fire induced a low-order detonation of a 155 mm "HE" round that was in the vehicle.



RESULT



Fire/detonation destroyed:

HMMWV
SINGARS Radios
M2 Compass
Bayonets
Star clusters
OVM Bag

2 M16 Rifles AN/PVS7A NVDs M2 Aiming Circle Propellant bags Canvas Personal Equip



AR 385-63 prescribes
Department of the Army and
Marine Corps range safety
policies, procedures,
responsibilities, and standards
for firing ammunition, guided
missiles, and large rockets.

POLICY



The safe conduct of soldiers firing, detonating explosives, and maneuvering on ranges is a command responsibility.

POLICY



- The safe conduct of soldiers firing, detonating explosives, and maneuvering on ranges is a command responsibility.
- Any individual observing a dangerous firing condition will immediately announce a cease-fire.



Commanders At All Levels With A Mission Involving Ranges Will:

- Ensure a range safety program is established
- Comply with range accident prevention policies

These are accomplished through the appointment of OICs and RSOs.



Who Can Be An OIC?

AR 385-63, Table 4-1 lays out rank requirements for different types of ranges.

Example: an artillery range requires an officer, warrant officer or an NCO with a rank of E-7 or above.



Who Can Be An RSO?

AR 385-63 Table 4-1 lays out rank requirements for different types of ranges.

Example: a live-fire exercise using organic weapons, squad through Company/Battery/Troop requires an officer, warrant officer or an NCO with a rank of E-6 or above.

GUIDELINES



Range Safety Certification Programs

Range safety certification programs programs will be used to train and qualify personnel in the duties of OIC and RSO for firing exercises and/or maneuver operations.

WAVIERS



Waivers And Exemptions

Waivers may be granted based on critical mission requirements that cannot be met by any other means.

WAVIERS



Waivers And Exemptions

The following personnel are granted waiver authority:

- MACOM commanders
- Superintendent, U.S. Military Academy
- Chief, National Guard Bureau (NGB)
- USMC commanding generals

REPORTING



Accident & Malfunction Reporting

- Accidents will be reported IAW AR 385-40.
- Malfunctions will be reported IAW AR 75-1.





SUMMARY

QUESTIONS?

